

# RWANDA

GLOBAL WATER STRATEGY | 2022-2027

**High-Priority Country Plan** 

In 2021, Rwanda was designated as a High-Priority Country under the U.S. government Global Water Strategy (GWS or Strategy). Over the next five years of the Strategy period, USAID/Rwanda will continue to work with the Government of Rwanda (GoR) and other stakeholders to strengthen sector governance; address key financing gaps; and increase access to area-wide, sustainable water and sanitation services in rural areas. USAID/Rwanda's investments over the next five years will increase access to basic water services for 120,000 people; provide basic sanitation to 100,000 people; provide 96,000 people with on-site sanitation; and mobilize roughly \$6 million for the water, sanitation, and hygiene (WASH) sector.

# CONTEXT

Rwanda has made remarkable progress since the 1994 civil war and genocide, lifting one million people out of poverty between 2000 and 2017 and achieving an average gross domestic product (GDP) growth rate of 8 percent per year. Most of the country is characterized by hilly landscapes and abundant lakes, rivers, and protected springs. However, despite its rapid economic development and surface water resources, Rwanda lags behind countries of similar socioeconomic status and population in terms of access to water and sanitation services and adoption of key hygiene behaviors.

2020 data from the World Health Organization/UNICEF Joint Monitoring Programme (JMP) show that just 60 percent of Rwandan households have access to at least basic water supply. There is also a substantial gap in access between urban and rural access to water, with 83 percent of urban households having access to basic water services compared to only 56 percent of rural households. While the open defecation rate is low, at about 2 percent, sanitation access is also low—with 69 percent of households having access to at least basic sanitation services. Due to the common practice of sharing latrines across multiple households in urban areas, which does not meet the JMP criteria for basic sanitation, only 50 percent of urban households have achieved basic sanitation services, compared to 72 percent of rural households. For hygiene, only 12 percent of households have access to a fixed handwashing facility with soap and water, but up to 84 percent of households have limited access to hand hygiene facilities, meaning that they have access to a facility, but soap and/or water was not available at the time of the survey.

Table I summarizes access to water and sanitation services in Rwanda, including figures from the Rwanda Household Survey 2019/2020 (EICV6), which are the numbers used by the GoR, and JMP statistics for "basic" and "safely managed," which are higher levels of service used to measure progress against Sustainable Development Goal (SDG) 6.

Table 1: Summary of water and sanitation access in Rwanda, 20201

	Improved - total (EICV6)	At least basic-total*	At least basic-urban*	At least basic-rural*	Safely managed - total*	Safely managed - urban*	Safely managed - rural*
Water <sup>2</sup>	89.2%	60%	83%	56%	12%	46%	5%
Sanitation <sup>3</sup>	89.6%	69%	51%	73%	No data	No data	54%

\*IMP, 2020

Rwanda has a strong policy framework for water and sanitation, described in more detail below. However, it has struggled to implement these policies and close the gap to access. Looking ahead, the GoR will face the following challenges and opportunities:

Financing gap in the water and sanitation sector: Rwanda faces a daunting funding gap in the water and sanitation sector. Despite rapid and consistent economic growth, the percentage of the Rwandan government budget for water and sanitation decreased from 1.9 percent in 2018 to 1.3 percent in 2022. The GoR developed the National Water Supply and Sanitation Master Plans to reach national and international goals for the WASH sector, but has secured only 32 percent of the amount needed to implement the Plan. Rwanda needs an additional RWF 320 billion/year (\$295 million USD equivalent), or four times the existing expenditure, to achieve the SDG target of universal access to safely managed water and sanitation services by 2030, and an additional RWF 855 billion/year (\$788 million USD equivalent) to reach the goals outlined in the Rwanda Vision 2050 described below.<sup>4</sup>

**Population growth and urbanization:** Rwanda is one of the most densely populated countries in Africa. Although most of the population lives in rural areas, the urban share has grown from 4.6 percent to 17.6 percent over the past 20 years, and this trend is likely to continue as the GoR actively incentivizes urbanization as part of its economic development strategy. Urbanization will put additional pressure on aging water supply and sanitation infrastructure. Roughly 61 percent of the urban population lives in informal settlements, which presents additional challenges for service delivery. Despite these challenges, increased urbanization also provides opportunities to increase private sector engagement in water supply and sanitation services and creates additional entry points to leverage financing.

Climate change: Due to Rwanda's hilly landscape, flooding and landslides often damage water and sanitation infrastructure. Shifting rainfall patterns, especially in the northern part of the country as a result of climate change, will likely increase flooding and erosion, leading to sedimentation in surface water sources and compromising water quality.<sup>6</sup> Increased incidence of drought is also expected in Eastern Province.<sup>7</sup> Increasing the climate resilience of existing and future water and sanitation infrastructure and services will be critical to achieving universal access in Rwanda.

### NATIONAL PRIORITIES

The GoR has strong policies and strategies to guide the country's development. These include "Rwanda Vision 2050," which details the GoR's goal to become a high-income country by 2050.8 Rwanda Vision 2050 is implemented through a series of five-year plans including the current National Strategy for Transformation 2017–2024 (NST1).9 NST1 targets for the WASH sector include 100 percent household coverage of improved water sources and 100 percent with basic sanitation by 2024, and universal safely managed water and sanitation services by 2030.

Table 2 summarizes GoR roles and responsibilities for water, sanitation, and hygiene. The Ministry of Infrastructure (MININFRA) leads WASH policy and strategy development and also leads sector coordination through the WATSAN Technical Working Group. The Ministry of Finance and Economic Planning (MINECOFIN) is responsible for budgeting and financing, while the Ministry of Health (MoH) is responsible for household sanitation and hygiene. The Water and Sanitation Corporation (WASAC) is the national water utility that services primarily urban areas and provides technical oversight over private operators in rural areas. The Rwanda Utility Regulatory Agency (RURA) serves as the regulator of water and sanitation services. The Rwanda Water Resource Board (RWB) is tasked with ensuring the availability of sufficient and well-managed water resources.

To ensure Rwanda transitions to a climate-resilient economy, the GoR has also established a number of strong policies and institutions that encourage climate change mitigation and adaptation efforts. Rwanda's Nationally Determined Contributions (NDC) submitted to the United Nations in 2020 targets \$11.5 billion in climate actions needed by 2030, including adaptation interventions for improved water resources management (WRM). The Rwanda Green Fund and the newly created Ireme Invest and NDC Facility will provide much-needed finance for these and other NDC-aligned activities.

Table 2: Summary of Government of Rwanda roles and responsibilities for WASH, water resources management and climate change

	Water	Sanitation and Hygiene	Water Resources Management	Climate Change			
	National Level						
Line agencies	Ministry of Infrastructure	Ministry of Health	Ministry of E	Ministry of Environment			
Implementing agencies	Water and Sanitation Corporation	Water and Sanitation Corporation (urban), Rwanda Biomedical Research Center (rural)	Corporation (urban), Rwanda Water Rwanda Biomedical Resources Board				
Coordinating body	District Level						
Coordinating body	District WASH Offices and District WASH Boards						
Implementing agencies/actors			District WASH boards	Catchment committees			

## **USAID APPROACH AND RESULTS FRAMEWORK**

USAID/Rwanda investments in WASH include the flagship five-year THRIVE WASH—<u>Isoko y'Ubuzima activity</u>, which was launched in 2021. The activity's three key objectives—improve WASH governance; improve drinking water services; and improve sanitation and handwashing services and products—address Strategic Objectives 1, 2, and 3 under the Global Water Strategy, as detailed by intermediate results below.



# **STRATEGIC OBJECTIVE I**

Strengthen Water and Sanitation Sector Governance, Financing, Institutions, and Markets

The WASH sector in Rwanda has clear goals, mandates, and structures. However, obstacles to implementation include unclear roles and responsibilities among the various institutions involved in monitoring and oversight of private operators, as well as a shortage of staff with the requisite skills, particularly at the district level.

#### Intermediate Results (IRs):

- **IR 1.1 Develop, strengthen, and implement inclusive laws, policies, and regulations:** THRIVE WASH will strengthen government and private sector capacity to implement inclusive laws, policies, and regulations through a district-wide, systems-based approach to expanding and sustaining water access. At the national level, the activity will help the GoR to develop and disseminate Technical Guidelines on Sustainable Rural Water Supply Services and to develop the Water Supply and Sanitation Law.
- **IR 1.2 Effectively mobilize and target public and private financing:** Efforts to mobilize public and private financing for water will include supporting MININFRA to develop the National WASH Finance Strategy and increasing private operators' financial management and resource mobilization capacity. For sanitation financing, USAID/Rwanda will continue to engage private entrepreneurs to expand their product lines to include WASH products and services and the national network of village savings and loan associations (VSLAs) to provide households with loans to purchase and install sanitation solutions.
- **IR 1.3 Improve the capacity and performance of regional, national, and subnational institutions:** USAID/Rwanda will work to build a stronger national- and district-level WASH workforce through training courses, engagement of WASH sector thematic working groups, and supporting the development of District WASH Investment Plans. District WASH staff will also be trained in inclusive WASH governance, planning, and full life cycle costing and operation and maintenance.

**IR I.4 Advance transparency, accountability, equity, and efficiency through participatory, data-driven decision-making:** Through THRIVE WASH, USAID/Rwanda will assist the RURA to develop the national billing and customer management system for rural water supply, develop key performance indicators for gender and social inclusion, and put into place mechanisms for dialogue and accountability between regulators, service providers, and citizens. In addition, USAID/Rwanda will support MININFRA to operationalize the WASH Management Information System.

Moving forward, USAID/Rwanda will continue to strengthen WASH sector governance and institutional strengthening through the THRIVE WASH activity. Recognizing the need to address the immense gap in financing to achieve the SDGs, the GoR's NDC Plan, and its 2050 Vision, USAID/Rwanda will also work with sector stakeholders to increase the investment readiness of public and private water and sanitation service providers to access public or commercial finance, including climate financing.



# **STRATEGIC OBJECTIVE 2**

Increase Equitable Access to Safe, Sustainable, and Climate-Resilient Drinking Water and Sanitation Services and Adoption of Key Behaviors

Although 95 percent of the GoR's WASH expenditures go to water supply, challenges persist in water service delivery. Rwanda's hilly terrain means that energy costs for pumping water are significant, which contributes to variable, and often high, tariffs in rural areas. RURA establishes the tariff structure for water, but private operators do not always abide by those rates and price gouging has been reported in rural areas. High rates of non-revenue water (NRW)—up to 70 percent in some areas—due to outdated and poorly managed infrastructure, also impact the quality and supply.

The sanitation sector is poorly resourced and receives the remaining 5 percent of sector funding. The GoR, through the Ministry of Health, delegates responsibility for rural sanitation and hygiene to households; however, accessing desirable and affordable sanitation technologies has been a challenge due to a lack of locally manufactured sanitation solutions.

#### Intermediate Results (IRs):

**IR 2.1 Increase area-wide access to safe, equitable, and affordable sanitation services:** USAID/Rwanda will work through government systems and the private sector to increase area-wide access to sanitation products and services. This includes igniting consumer demand through a market-based sanitation approach and social and behavior change interventions. THRIVE WASH will also work to strengthen the supply chain for desirable, inclusive sanitation products, including adapted toilet seats for the elderly, children, and people with physical disabilities, at District Sanitation Centers and Community Showrooms. To address financing, VSLAs will be mobilized to support households with loans for WASH products and services and to connect households to micro-finance institutions for larger loans to small businesses.

**IR 2.2** Increase access to equitable, safe, reliable, and affordable drinking water services: USAID/Rwanda, through THRIVE, will increase access to equitable, safe, reliable, and affordable drinking water services through the construction and rehabilitation of water systems along with water quality monitoring plans. THRIVE WASH will also support districts to develop WRM plans that emphasize quantity, quality, and continuous discharge at all water sources. At the national level, THRIVE will support dissemination and implementation of the National Water Quality Monitoring and Surveillance Strategy.

**IR 2.3 Improve performance and climate resilience of water and sanitation service providers:** USAID/Rwanda will support districts and private operators to improve their capacity to manage water services. THRIVE WASH will also assist RURA in developing a customer management system to facilitate improved billing, revenue collection, and reporting. The activity will train and mentor private operators to address barriers to efficiency and profitability, including decreasing NRW and improving billing and collection practices to increase tariff recovery.

**IR 2.4 Increase adoption of key hygiene practices:** USAID/Rwanda will support the MoH to implement the National Handwashing sub-strategy (2019–2024) to improve hand hygiene practices in homes and schools. Activities will include training champions on best practices for interpersonal communication, conducting national awareness campaigns, and working with school health clubs to improve menstrual health and hygiene and handwashing with soap.

Over the next five years, USAID/Rwanda will continue to support activities to increase equitable access to water and sanitation services and improve hygiene behaviors. While the current focus is in rural areas, given the GoR's emphasis on urbanization and THRIVE WASH's use of market-based approaches, USAID/Rwanda will increasingly focus on sanitation in peri-urban and satellite cities. As stated in SO 1, USAID/Rwanda will also explore opportunities to further strengthen the performance of private operators to increase their readiness to apply for additional funding.



# **STRATEGIC OBJECTIVE 3**

Improve Climate-Resilient Conservation and Management of Freshwater Resources and Associated Ecosystems

Although Rwanda has abundant rivers and lakes, climate change is likely to decrease the predictability of surface water quality and quantity. Moreover, little is known about the country's groundwater resources, which are critical to the diversification and climate resilience of Rwanda's overall water supply. Increasing capacity for WRM, including groundwater management, will allow for increased resilience of Rwanda's water supplies, and improve adaptation overall.

#### Intermediate Results (IRs):

**IR 3.1 Allocate and use water resources more equitably and efficiently:** USAID/Rwanda, through THRIVE WASH, will focus on improving water service provider performance through, among other approaches, the reduction of NRW. To the extent that NRW results in water conservation, this will increase water availability and increase the efficiency of water usage. Rwanda's water resources have many competing uses, including irrigation, livestock, and hydropower in addition to domestic uses. The GoR's ability to ensure the efficient and equitable allocation of those resources will be enhanced by decreasing NRW. In addition, climate decision support tools will be considered.

IR 3.2 Enhance reliability and quality of water resources through watershed management, including protection, restoration, and nature-based solutions and IR 3.3 Improve the climate resilience of water resources management (WRM): USAID/Rwanda will explore opportunities to better understand availability of groundwater resources, including through mapping, assessments, and modeling exercises. These will serve as entry points for strengthening the GoR's groundwater management capacity as well. The THRIVE WASH activity will also focus on WRM plans, which aim to build the capacity of districts to manage climate risks, and improve their capacity to maintain the quality and quantity of water that they provide to households. WRM plans include the identification of measures to protect water sources, such as nature-based solutions, and include consideration of climate impacts when planning for the future, with an aim to allocate water resources as equitably and efficiently as possible.

#### **PRINCIPLES**

USAID/Rwanda will also integrate the GWS Operating Principles throughout its programming. USAID/Rwanda's water and sanitation programming is built upon a **systems approach** focused on catalytic investments to improve the enabling environment for sustainable WASH service provision. THRIVE WASH will continue to strengthen WASH systems in Rwanda through its area-wide approach to service provision as well as a focus on capacity building at all levels, from government ministries to private operators. **Gender equality and social inclusion** is also integrated throughout USAID/RwandaWASH programming. This includes WASH monitoring systems that disaggregate data for gender, sex, disabled and vulnerable groups, evaluation of service provider performance on equity criteria, improving service providers' customer approach to meet the needs of marginalized groups, and increasing women's agency in household decision-making.

#### MISSION FRAMEWORK RESULTS

The approach outlined in this plan aligns with USAID/Rwanda's Country Development Cooperation Strategy (CDCS) results framework. Specifically:

#### **Development Objectives (DOs):**

**DOI:THRIVE – Improved Health Outcomes:** THRIVE WASH directly addresses the Mission's IR 1.2, Improved Utilization of High-Quality Health, Nutrition, and WASH Services. By strengthening sector governance and policy implementation, the activity improves the enabling environment for the delivery of high-quality WASH services. Additionally, through its market-based sanitation approach and support to private operators, the activity is increasing demand and strengthening the supply chain for affordable sanitation solutions while also improving the quality, reliability, and climate resilience of water services. Over the next five years, USAID/Rwanda will build upon this progress, further expanding access and utilization of high-quality WASH services.

DO3: PROSPER – Increased Inclusive and Sustainable Private Sector-Driven Growth: Through its efforts to strengthen the market for affordable, high-quality sanitation solutions, THRIVE WASH is driving progress towards the Mission's IR 3.1: Enabling Environment for Private Sector Competitiveness Strengthened. The activity is addressing the sanitation market from both the supply and demand sides, developing a stronger market and supply chain for sanitation solutions while also leveraging the existing network of VSLAs to increase the customer base. In the next five years, USAID/Rwanda will replicate the successes of District Sanitation Centers to build a more sustainable market for sanitation solutions that will outlast THRIVE WASH.

**DO4: ENGAGE – Increased Government Responsiveness to Citizen Priorities:** Challenges related to financial management and transparency continue to plague private operators, which are critical to the GoR's goal to expand water services in rural areas. Moreover, the sector as a whole faces a daunting financing gap. By training private operators on billing, financial management, and customer management systems, THRIVE WASH is addressing the Mission's IR 4.3: Public Revenue Management Improved. Additionally, the activity supports the development of District Investment Plans and assists private operators in addressing NRW. The capacity of private operators and districts to effectively and efficiently manage resources will be integral to the WASH sector's financial sustainability and resilience, and to the GoR's ability to expand access to Rwanda's largely rural population.

#### **KEY RISKS AND MITIGATION STRATEGIES**

As outlined above, **climate change** poses significant risks to water and sanitation infrastructure in Rwanda. The country is expected to experience more frequent periods of heavy rainfall, which may increase flooding, erosion, and landslides, damaging water infrastructure and compromising surface water quality. To mitigate the impacts of climate change, USAID/Rwanda will prioritize the climate resilience of any new water and sanitation infrastructure and explore ways to make existing infrastructure more resilient to climate impacts.

Emerging diseases and infectious disease outbreaks also threaten water security, sanitation, and hygiene activities in Rwanda. Possible outbreaks of cholera, COVID-19, and Ebola could lead to the redistribution of WASH funds to address public health crises. Additionally, in cases where outbreaks of infectious disease negatively affect the Rwandan economy, customers may have less money available to pay for water bills or sanitation products. This could decrease revenue for private operators and sanitation entrepreneurs, jeopardizing THRIVE's efforts to bolster private operator business viability and develop a market for sanitation solutions. USAID/Rwanda will continue to advocate for consistent government and private sector funding for WASH and will also aim to support private operators and sanitation entrepreneurs to become more resilient to declining revenue as a result of public health crises.

Finally, regional conflict, instability, migration, and food insecurity may affect Rwanda's water and sanitation services. Persistent conflict and instability in neighboring Burundi and the Democratic Republic of the Congo lead to periodic influxes of refugees in Rwanda, placing additional pressure on water and sanitation infrastructure. USAID/Rwanda will continue to support the Rwandan government's strategic planning efforts to ensure that water service providers are better able to absorb refugee populations, including in refugee camps. In addition, increased frequency of floods and droughts combined with higher prices for food and fuel could increase food insecurity. USAID/Rwanda will assist Rwandan households to increase their resilience to these stressors through inclusive agricultural growth programs that strengthen value chains for food commodities and encourage private sector growth and competitiveness.

## **BUDGET**

This is a costed plan based on prior year resources still available for programming, the FY 2022 estimated allocation of \$4.9 million, and the FY 2023 President's Budget Request of \$6.5 million.

## **EXPECTED RESULTS**

From 2022 to 2027, USAID activities are estimated to provide Rwanda with:



Basic water services for 120,000 people



Basic sanitation access for (100,000 people) and on-site sanitation for (96,000 people



25 institutions strengthened through THRIVE WASH's capacity building activities at the national and district level<sup>10</sup>



\$6 million mobilized for the WASH sector through sales at DSCs, reduced rates of non-revenue water, VSLA funding for sanitation, and improved cost recovery for private operators

#### **Endnotes**

- I "Rwanda Household Survey 2019/2020," National Institute of Statistics of Rwanda, https://www.statistics.gov.rw/publication/rwanda-householdsurvey-20192020.
- 2 According to the JMP ladder for water, "improved" drinking water sources are those that have the potential to deliver safe water by nature of their design and construction. "Basic" water service requires water from an improved source, with the additional stipulation that collection time is not more than 30 minutes for a round trip including queuing. "Safely managed" requires that drinking water from an improved water source is accessible on premises, available when needed, and free from fecal and priority chemical contamination.
- 3 According to the JMP ladder for sanitation, "improved" sanitation facilities are those designed to hygienically separate excreta from human contact. "Basic" sanitation is the use of improved facilities that are not shared with another household. "Safely managed" sanitation is a higher level than "basic," and requires that excreta are safely disposed of in situ or removed and treated offsite.
- 4 "Rwanda—National water supply and sanitation master plans," African Development Bank Group, last modified 23 February 2023, https://projectsportal.afdb. org/dataportal/VProject/show/P-RW-EA0-013
- 5 "Housing Finance in Rwanda," Center for Affordable Housing Finance in Africa, https://housingfinanceafrica.org/countries/rwanda/.
- 6 Muhirea, I., and F.Ahmed. "Spatio-temporal trend analysis of precipitation data over Rwanda." South African Geographical Journal Suid-Afrikaanse Geografiese Tydskrif 97.1 (2015): 50-68; Muhire, I., F.Ahmed, and Elbasit MMM Abd. "Spatio-temporal variations of rainfall erosivity in Rwanda." Journal of Soil Science and Environmental Management 6.4 (2015): 72-83.
- 7 \_Mirindi, J. D. Assessment of the Past and Future Meteorological Drought Characteristics in the Eastern Province of Rwanda Under a Changing Climate. Diss. University of Nairobi, 2022.
- 8 "Republic of Rwanda Vision 2050," https://www.minaloc.gov.rw/
- 10 Institutional strengthening includes addressing human resources at both national and district levels, improving monitoring and information systems, improving planning and coordination, budgeting processes, financial management, resource mobilization, and tariff setting, etc. and improving accountability and regulation including feedback mechanisms between providers and customers to promote transparency.